REMARKS

The Office Action dated June 17, 2004 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 1-33 are respectfully submitted for consideration.

Claims 13-15, 21, 26, and 28-33 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-12, 16-20, 22-25, and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Muller (U.S. Patent No. 6,246,680) in view of Erimli (U.S. Patent No. 6,061,351). The Office Action took the position that Muller discloses all of the elements of claims 1-12, 16-20, 22-25, and 27, with the exception of storing the data in one of the first memory or the second memory as a linked list. The Office Action then relies on Erimli to cure the deficiency in Muller. The above rejection is respectfully traversed for the reasons which follow.

Claim 1, upon which claims 2-26 are dependent, recites a network switch comprising at least one port data port interface, a first memory, a second memory, and a memory management unit. The memory management unit is in connection with the at least one data port interface, the first memory, and the second memory. The memory management unit receives data from the at least one data port interface, determines if the data is to be stored in one of the first memory or the second memory, stores the data in

one of the first memory or the second memory as a linked list, retrieves the data from one of the first memory or the second memory, and forwards the data for egress.

Claim 27, upon which claims 28-33 are dependent, recites a method for storing data in a network switch. The method includes the steps of receiving the data to be transmitted to an egress at an input to a memory management unit, formatting the data received as a linked list, determining if the data is to be stored in a first memory or a second memory, and storing the data in the first memory or the second memory based on the determining step.

The prior art references of Muller and Erimli fail to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

Muller discloses a highly integrated multi-layer switch element architecture. A network device building block is provided which includes a network interface with multiple ports for transmitting and receiving packets over a network. The network device building block also includes a packet buffer storage which is coupled to the network interface. The packet buffer storage acts as an elasticity buffer for adapting between incoming and outgoing bandwidth requirements. The network device building block further includes a switch fabric which is coupled to the network interface. The switch fabric provides forwarding decisions for received packets.

Erimli discloses a multicopy queue structure with searchable cache area. Erimli maintains a count of the number of copies of a frame that have been transmitted from a network switch and uses a cache memory to store the number of copies of a frame to be

transmitted from the network switch. A queue is used to queue entries that indicate the transmission of a copy of a frame, and these queued entries are released to a buffer manager.

With respect to the rejection of claim 1, Muller fails to disclose or suggest a first **and** second memory. The pointer RAM cited in the Office Action as a first memory does not constitute a first memory as recited in claim 1. Rather, the pointer RAM is part of the shared memory manager. Specifically, Muller discloses that "the shared memory manager 220 also includes a pointer random access memory (PRAM) 320 coupled to the buffer manager 325. The pointer RAM 320 is an on-chip pointer table that stores usage counts for pages (buffers) of the shared memory. In this manner, the number of buffer owners at a given time is known by the buffer manager 325" (Muller, Column 8, lines 9-14). The pointer RAM disclosed in Muller does not store packet data, and as a result does not correspond to the first memory element of the claimed invention. Therefore, Muller does not disclose a first **and** second memory as recited in claim 1.

Additionally, Muller fails to disclose or suggest determining if the data is to be stored in one of the first memory or the second memory. Muller discloses that the packet data is always stored in the shared memory until the packet is forwarded to the appropriate output packet process. Muller teaches that "the input packet process (IPPs) request forwarding decisions from the switch fabric 210 for received packets and temporarily store the packet data in the shared memory 230 until a forwarding decision is returned. Upon receipt of a forwarding decision, the IPPs forward the corresponding

packet to the appropriate OPPs, if any" (Muller, Column 5, lines 51-58). Consequently, Muller fails to disclose determining whether the data is to be stored in the first memory or the second memory as recited in claim 1. According to Muller, data is always stored in the shared memory until a forwarding decision is returned. Muller, therefore, fails to disclose or suggest all of the elements of claim 1.

Furthermore, Erimli fails to cure these deficiencies in Muller. Thus, the combination of Muller and Erimli also fails to disclose or suggest all of the elements of claim 1. For at least this reason, Applicants respectfully request that claim 1 be allowed.

Applicants note that claims 2-26 are dependent upon claim 1. Therefore, it is respectfully submitted that claims 2-26 should be allowed for at least their dependence on claim 1, and for the specific limitations recited therein.

With respect to the rejection of claim 27, Applicants respectfully submit that Muller fails to disclose "determining if the data is to be stored in a first memory or a second memory; and storing the data in the first memory or second memory based on the determining step." As discussed above, Muller does not disclose a first and second memory, nor does it disclose determining whether the data is to be stored in the first memory or the second memory. In addition, Erimli fails to cure these deficiencies in Muller. Consequently, the combination of Muller and Erimli fails to disclose or suggest all of the elements of claim 27.

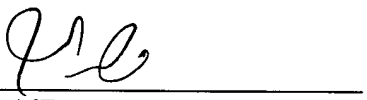
It is respectfully submitted that claims 28-33 are dependent upon claim 27 and therefore should be allowed for at least their dependence on claim 1, and for the specific limitations recited therein.

Applicants respectfully submit that the combination of Muller and Erimli fail to disclose or suggest critical and important elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-33 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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